

Please replace the Abstract of the Disclosure with the following:

ABSTRACT OF DISCLOSURE

A diffraction grating element provides a large angular dispersion and excellent diffraction characteristics. A buried structure includes a first medium with a refractive index of n_1 ; a second medium with lower refractive index of n_2 than the first medium. A diffraction grating is formed at the interface between the first and second mediums. One of the first and second mediums is a solid, and the other thereof is a solid or a liquid. An anti-reflection film is formed on one surface of the first medium on which the diffraction grating is not formed and lies in contact with a medium with a refractive index n_0 . An anti-reflection film is also formed on one surface of the second medium on which the diffraction grating is not formed lies in contact with the medium with the refractive index n_0 .